

REMARKS

U.S. Patent No. 5,984,867 (Exhibit 1) issued on November 16, 1999 to Robert K. Deckman et al. (hereinafter "the Deckman patent"). The above-identified application is a continuation of co-pending application Serial No. 09/385,812, filed August 30, 1999, which in turn is a continuation of Serial No. 08/903,516, filed on July 30, 1997, now issued as U. S. Patent No. 5,944,736, which in turn is a continuation of Serial No. 08/787,748, filed on January 27, 1997, now abandoned, which in turn is a continuation-in-part of application Serial No. 08/619,903, filed on March 20, 1996, now issued as U.S. Patent No. 5,976,171, which in turn is a continuation-in-part of co-pending application Serial No. 08/604,161, filed on February 20, 1996, now issued as U.S. Patent No. 5,730,757. The present application claims the benefit under 35 U.S.C. §120 of these previously filed United States patent applications.

Please be advised that the claims included in the above-identified application, and presented in this Request for Interference, are introduced for the purpose of provoking an interference with the Deckman patent. Applicants' claims 1, 2, 3, 4, 5, 6, 7, and 8 were copied verbatim from the Deckman patent and are identical to claims 1, 2, 3, 4, 6, 7, 9, and 10, respectively, of the Deckman patent. Applicants' claims 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19 were substantially copied from the Deckman patent, with only minor differences in claim language, and correspond to claims 1, 2, 3, 4, 6, 7, 8, 9, 10, and 12, respectively, of the Deckman patent. Because Applicant's effective filing date is January 27, 1997, Applicant is senior to the filing date of August 15, 1997 for the Deckman patent and senior to the filing date of May 2, 1997 of provisional application No. 60/045,296, which is the parent to the Deckman patent. Thus, Applicant need not present a prima facie showing pursuant to 37 C.F.R. § 1.608. However, in addition to showing support for the copied claims in the instant application, which appears in Appendix A to this Request for Interference, Applicants are

able to show support for the copied claims in related application nos. 08/619,903 (filed March 20, 1996) and 08/604,161 (filed February 20, 1996), which are attached hereto as Exhibits 2 and 3, respectively. The support for copied claims found in application nos. 08/619,903 and 08/604,161 appears in Appendix B and C, respectively, to this Request for Interference.

In accordance with 37 CFR § 1.607, the copied claims may be specifically applied to Applicants' disclosures in the instant application and related application nos. 08/619,903 and 08/604,161, as set forth in Appendices A, B, and C, respectively. Although the cited specification support appearing in Appendices A, B, and C is extensive, the cited support is not intended to be exhaustive. Applicants, therefore, reserve their right to establish support by reference to specification text and figures not cited herein.

Before addressing the count, both the Deckman patent and the instant application will be generally discussed.

The present application discloses an apparatus and associated methods for providing improved access to a patient's internal mammary artery (IMA) to enable the surgeon to dissect the IMA and perform the necessary arteriotomy and anastomosis procedures which are a part of a surgical procedure known as the Coronary Artery Bypass Graft (CABG) procedure. In general, the apparatus of the present invention, referred to as the access platform, is inserted between a patient's ribs and then used to separate and vertically offset the patient's ribs to access the patient's IMA. The access platform generally includes a spreader member, first and second blades arms attached to the spreader member, first and second blades attached to first and second blade arms, an offset member coupled to one of the blades and the spreader member, wherein the offset member includes a shoe or support pad configured to rest on a patient's chest. The offset member is used to lift the interconnected blade and a corresponding portion of the patient's ribcage. The shoe or support pad may be adjustable relative to the interconnected blade or spreader member. In at least one

embodiment, the shoe or support pad is coupled to one of the blades and spreader member in a manner that enables the interconnected blade and shoe or support pad to rotate in unison about an axis that is transverse to the spreader member. In operation, the first and second blades are positioned at opposing sides of an incision in the patient's chest, the shoe is adjusted to rest on the patient's chest, the blades are laterally spread apart to separate the ribs, and one of the blades is lifted relative to the other blade to raise a portion of the patient's ribcage. If desired, the blades may be simultaneously spread and lifted.

The Deckman patent claims a surgical retractor and method of retracting. In apparatus claim 1, the surgical retractor includes a frame member, first and second retractor blades with one of the blades being laterally movable relative to the other blade, a foot coupled to the frame member and first and second blades wherein the foot is adjustable relative to the frame member, a locking mechanism to lock the foot in a selected position relative to the frame member, and an actuator to move one of the blades relative to the other blade. In apparatus claim 6, the retractor for spreading a patient's ribs includes a frame, first and second blades coupled to the frame with the second blade being movable relative to the first blade and including a rotatable connector to enable rotation of the second blade relative to the frame, an actuator to move the blades toward or away from one another, and a locking mechanism which selectively permits and prevents rotation of the rotatable connector. In method claim 4, a method of retracting includes the steps of positioning first and second blades against opposing sides of an incision in the patient's body, coupling a foot to the frame member wherein the foot is adjustable relative to the frame member and configured to rest on a patient's chest, adjusting the position of the foot relative to the frame member, and imparting movement to the first and second blades to simultaneously move the blades apart and lift one side of the incision.

PROPOSED COUNT

Applicants propose two Counts for this interference; a first count directed to the apparatus claims and a second count directed to the method claims. The Counts are set forth separately below. Please note that the Counts and Applicants' claims presented as corresponding to the Counts, are fully supported and are disclosed at least as early as January 27, 1997 and substantially supported and disclosed as early as February 20, 1996, the filing date of Application No. 08/604,161 (Exhibit 3). Accordingly, Applicants should be senior party with respect to the subject matter of the requested interference.

Further, as established by the specification support set forth in Appendix A, the copied claims do not add any new matter to the pending application. In addition, the specification of the instant application describes what was the best mode of practicing the invention known to the inventors at the time of filing, and that by corresponding various elements of the disclosed embodiments to any claim it is not to be inferred that Applicants' invention is limited to that disclosed embodiment.

COUNT I

Count I is set forth below:

I. A surgical retractor comprising:
a spreader;
a first blade coupled to the spreader;
a second blade coupled to the spreader, the second blade being movable toward and away from the first blade,

a shoe coupled to one of the spreader member and the first and second blades, the shoe having a support surface configured to engage a surface of a patient's body;
a locking member coupled to said spreader member; and
a drive member for moving said at least one retractor blade with respect to the other retractor blade.

COUNT II

Count II is set forth below:

II. A method of retracting a portion of a patient's body to carry out a surgical procedure, the method comprising steps of:

positioning first and second retractor blades against opposite sides of an incision formed in a patient's body, the first and second retractor blades being coupled to a spreader member so as to be relatively movable toward or away from each other along a first axis;

coupling at least one shoe to the spreader member so as to be adjustable with respect to the spreader member in a manner which is transverse to the first axis, the shoe having a support surface configured to rest against a surface of the patient's body adjacent the incision;

adjusting the relative position of the shoe with respect to the spreader member and fixing the shoe in a position at which the support surface of the shoe rests against the surface of the patient's body adjacent the incision; and

imparting relative movement to the first and second blades to simultaneously move the blades apart along the first axis and lift one side of the incision with respect to the other side of the incision.

Applicants submit that claims 1-3, 6-10, and 12 of the Deckman patent (Exhibit 1) correspond to proposed Count I and that claim 4 of the Deckman patent corresponds to proposed Count II. Applicants further submit that the claims of the present application, as presented below, correspond to proposed Counts I and II as follows: claims 1-3, 5-8, 10-12 and 14-19 correspond to proposed Count I and claims 4 and 13 correspond to proposed Count II. In conformance with 35 U.S.C. § 135(b), the presented claims were copied into the subject application upon filing of the subject application on January 10, 2000, which is prior to one year from the date on which the Deckman patent was granted.

Claims Presented for Interference

1. A surgical retractor comprising:

a frame member;

first and second retractor blades coupled to the frame member, the retractor blades having retraction surfaces configured to engage an incision in a patient's body, wherein at least one of the first and second retractor blades is movable with respect to the frame member along a first axis to position the retractor blades toward or away from each other;

a foot coupled to one of the frame member and the first and second blades, the foot having a support surface configured to engage a surface of a patient's body, wherein the foot is adjustable in a linear direction relative to the frame member and traverse to said first axis;

a locking mechanism for locking the foot and the frame member in a selected relative position along said axis which is transverse to the first axis; and

an actuator for moving said at least one retractor blade with respect to the other retractor blade along the first axis.

2. The retractor of claim 1, wherein the frame member comprises an elongated bar and the first and second retractor blades are respectively coupled to first and second arms coupled to the bar, one of said arms being movable with respect to the bar along the first axis, the foot being movable in the linear direction along an axis which is transverse to the first axis.

3. The retractor of claim 1, wherein the second blade is rotatable about a second axis which is transverse to the first axis, the foot being coupled to the second blade so that the foot and the second blade rotate together about the second axis.

4. A method of retracting a portion of a patient's body to carry out a surgical procedure, the method comprising steps of:

positioning first and second retractor blades against opposite sides of an incision formed in a patient's body, the first and second retractor blades being coupled to a frame member so as to be relatively movable toward or away from each other along a first axis;

coupling at least one foot to the frame member so as to be adjustable with respect to the frame member in a linear direction along an axis which is transverse to the first axis, the foot having a support surface configured to rest against a surface of the patient's body adjacent the incision;

adjusting the relative position of the foot with respect to the frame member along said linear direction and fixing the foot in a position at which the support surface of the foot rests against the surface of the patient's body adjacent the incision; and

imparting relative movement to the first and second blades to simultaneously move the blades apart along the first axis and lift one side of the incision with respect to the other side of the incision.

5. A rib retractor for spreading apart first and second ribs to create an opening in the patient's chest, comprising:

a frame;

a first blade coupled to the frame;

a second blade coupled to the frame, the second blade being movable toward and away from the first blade, the second blade having a rotatable connector which permits rotation of the second blade relative to the frame;

an actuator for moving at least one of the first and second blades toward the other of the first and second blades;

a foot coupled to at least one of the frame and the first and second blades, the foot having a support surface configured to engage the surface of the patient's chest when lifting the second rib with the second blade; and

a locking mechanism which selectively permits and prevents rotation of the rotatable connector, the locking mechanism being movable between a locked position, in which rotation of the rotatable connector is prevented, and an unlocked position, in which rotation of the rotatable connector is permitted, the locking mechanism being in the locked position for spreading the first and second ribs apart without lifting the second rib, the locking mechanism being in the unlocked position to permit rotation of the rotatable connector for spreading the first and second ribs apart and lifting the second rib.

6. The rib retractor of claim 5, wherein:

the foot is linearly movable relative to the frame; and

the rib retractor also comprises a locking mechanism selectively permitting and preventing linear movement of the foot relative to the frame.

7. The rib retractor of claim 5, wherein:

the frame has a first arm and a second arm, the first blade being attached to the first arm and the second blade being attached to the second arm.

8. The rib retractor of claim 7, wherein:

the frame includes an elongate bar, the first and second arms being mounted to the bar, the second arm being movable along the elongate bar toward and away from the first arm along a first axis.

9. The rib retractor of claim 5, wherein:

the locking mechanism may be moved from the locked position to the unlocked without removing the first and second blades from the opening in the patient's chest.

10. A surgical retractor comprising:

a spreader member;

first and second retractor blades coupled to the spreader member, wherein at least one of the first and second retractor blades is movable with respect to the spreader member along a first axis to position the retractor blades toward or away from each other;

a shoe coupled to one of the spreader member and the first and second blades, the shoe having a support surface configured to engage a surface of a patient's body, wherein the shoe is adjustable relative to the spreader member in a manner which is transverse to said first axis;

a locking member for locking the shoe and the spreader member in a selected relative position; and

a drive member for moving said at least one retractor blade with respect to the other retractor blade along the first axis.

11. The retractor of claim 10, wherein the spreader member comprises an elongated member and the first and second retractor blades are respectively coupled to first and second arms coupled to the elongated member, one of said arms being movable with respect to the elongated member along the first axis, the shoe being movable relative to the elongated member in a manner which is transverse to the first axis.

12. The retractor of claim 10, wherein the second blade is rotatable about a second axis which is transverse to the first axis, the shoe being coupled to the second blade so that the shoe and the second blade rotate together about the second axis.

13. A method of retracting a portion of a patient's body to carry out a surgical procedure, the method comprising steps of:

positioning first and second retractor blades against opposite sides of an incision formed in a patient's body, the first and second retractor blades being coupled to a spreader member so as to be relatively movable toward or away from each other along a first axis;

coupling at least one shoe to the spreader member so as to be adjustable with respect to the spreader member in a manner which is transverse to the first axis, the shoe having a support surface configured to rest against a surface of the patient's body adjacent the incision;

adjusting the relative position of the shoe with respect to the spreader member and fixing the shoe in a position at which the support surface of the shoe rests against the surface of the patient's body adjacent the incision; and

imparting relative movement to the first and second blades to simultaneously move the blades apart along the first axis and lift one side of the incision with respect to the other side of the incision.

14. A rib retractor for spreading apart first and second ribs to create an opening in the patient's chest, comprising:

a spreader;

a first blade coupled to the spreader;

a second blade coupled to the spreader, the second blade being movable toward and away from the first blade, the second blade having a rotatable connector which permits rotation of the second blade relative to the spreader;

a drive member for moving at least one of the first and second blades toward the other of the first and second blades;

a shoe coupled to at least one of the spreader and the first and second blades, the shoe having a support surface configured to engage the surface of the patient's chest when lifting the second rib with the second blade; and

a locking member which selectively permits and prevents rotation of the rotatable connector, the locking member being movable between first and second positions, the locking member being in the first position for spreading the first and second ribs apart without lifting the second rib, the locking member being in the second position for spreading the first and second ribs apart and lifting the second rib.

15. The rib retractor of claim 14, wherein:
the shoe is movable relative to the spreader; and
the rib retractor also comprises a second locking member selectively permitting and preventing linear movement of the shoe relative to the spreader.

16. The rib retractor of claim 14, wherein:
the shoe is coupled to the second blade so that the shoe and the second blade are rotatable together.

17. The rib retractor of claim 14, wherein:
the spreader has a first arm and a second arm, the first blade being attached to the first arm and the second blade being attached to the second arm.

18. The rib retractor of claim 17, wherein:
the spreader includes an elongate member, the first and second arms being mounted to the elongate member, the second arm being movable along the elongate member toward and away from the first arm along a first axis.

19. The rib retractor of claim 14, wherein:
the locking member may be moved from a locked position to an unlocked position without removing the first and second blades from the opening in the patient's chest.

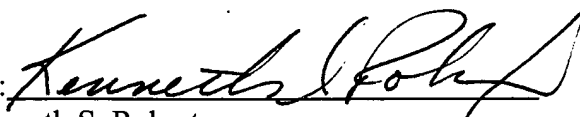
CONCLUSION

Applicants respectfully request a declaration of an interference with U.S. Pat. No. 5,984,867
to Robert K. Deckman et al. having the proposed Count given above.

Respectfully submitted,

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Dated: January 24, 2000

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